



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/668,426	09/23/2003	Reed Carver	Orb-021	2390

7590 10/13/2004

Brian M. Kolkowski
Orbital Research, Inc.
Suite 500
4415 Euclid Avenue
Cleveland, OH 44103

EXAMINER

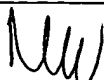
BASINGER, SHERMAN D

ART UNIT	PAPER NUMBER
----------	--------------

3617

DATE MAILED: 10/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center">Office Action Summary</p>	<p>Application No.</p> <p align="center">10/668,426</p>	<p>Applicant(s)</p> <p align="center">CARVER ET AL</p>	
	<p>Examiner</p> <p align="center">Sherman D. Basinger</p>	<p>Art Unit</p> <p align="center">3617</p>	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because the abstract should be only one paragraph. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3-7 and 9-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Burg.

The steering nozzle is nozzle 45 of figure 11. The at least one groove is the lower one of grooves 46. This “the groove” has a surface area, and at least 75% of this surface area is located in the lower half of the interior surface area of the steering nozzle.

The nozzle comprises two grooves 46. Each groove 46 comprises at least two sides with a distinct angle between the two sides.

With regard to claims 11, 12, 13, 17, 18 and 19, because applicant has not defined within the claims the meaning of 0.001r, 1.5r, 0.002c, 0.4c, 0.01w and 3w, the grooves 46 of Burg are felt to anticipate these claims. Applicant has not given a meaning to “r”, “c” and “w” within the claims.

With regard to claim 20, see Burg, column 7, lines 11-14. The addition of grooves 46 to the sides of the nozzle for steering would anticipate at least four grooves-two for trim and two for steering.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burg in view of Kobayashi.

The boat of Burg does not comprise two or more propulsors. Kobayashi shows a boat with two propulsors. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to provide the boat of Burg with two propulsors both similar to the one propulsor of Burg.

Motivation to do so is to provide more power to the boat of Burg.

6. Claims 11-13 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burg.

The grooves of Burg do not have the length, width and spacing as defined in the above claims; however, to provide the grooves 46 of Burg with the claimed length, width and spacing as defined in the above claims would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject

matter pertains. Motivation to do so is to make a nozzle of a particular size having grooves of a particular width, length and spacing.

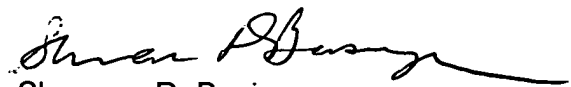
Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wilson is cited to show grooves 13. Tate et al is cited to show a steering nozzle in which grooves such as those of Wilson could possibly be used.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherman D. Basinger whose telephone number is 703-308-1139. The examiner can normally be reached on M-F (6:00-2:30 ET).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel J. Morano can be reached on 703-308-0230. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Sherman D. Basinger
10/27/104

Application/Control Number: 10/668,426
Art Unit: 3617

Page 5

Primary Examiner
Art Unit 3617

sdb
10/7/04